

It is expected that a Quorum of the Personnel Committee, Administration Committee, and Common Council will be attending this meeting: (Although it is not expected that any official action of any of those bodies will be taken)

CITY OF MENASHA
Board of Public Works Meeting
Third Floor Council Chambers, 140 Main St., Menasha
February 5, 2007

6:15 PM

AGENDA

 [Back](#)  [Print](#)

I. CALL TO ORDER

A. -

II. ROLL CALL/EXCUSED ABSENCES

A. -

III. MINUTES TO APPROVE-MINUTES & COMMUNICATIONS TO RECEIVE

Minutes to approve:

A. -

☐

[Attachments](#)

IV. DISCUSSION

A. Recommendation to Eliminate 4-Way Stop Traffic Control at Deerhaven Drive and Southfield Drive

☐

[Attachments](#)

B. Recommendation to Maintain 4-Way Stop Traffic Control at First Street and Appleton Street; 500 – 600 Blocks of First Street

☐

[Attachments](#)

C. Change Order -- Vinton Construction Co.; River Street Relocation Roadway Construction; Contract Unit No. 2006-06; ADD: \$13,117.20 (Change Order No. 2)

☐

[Attachments](#)

D. Payment -- Dorner, Inc.; Nature's Way; Contract Unit No. 2006-08; \$44,849.35 (Payment No. 3)

☐

[Attachments](#)

E. Payment -- Vinton Construction Co.; River Street Relocation Roadway Construction; Contract Unit No. 2006-06; \$23,019.17 (Payment No. 5)

☐

[Attachments](#)

F. Recommendation to Move Street Light from Pole #1161 to #1160 because of the Trees, Fourth Street (Ald. Taylor)

G. Recommendation to Move Street Light from Pole #1163 to #1162 because of the Trees, Fourth Street (Ald. Taylor)

H. Recommendation to Move Street Light from Pole #1179 on the Corner of Fourth and DePere to Pole #1164 (Ald. Taylor)

I. Recommendation to Move Street Light from Pole #1195, Northeast Corner, Sixth and DePere to Pole #1196 (Ald. Taylor)

J. Authorization to Participate in County Trunk Highway AP Project (Winnebago County)

☐

[Attachments](#)

V. ADJOURNMENT

A. -

"Menasha is committed to its diverse population. Our Non-English speaking population or others with disabilities are invited to contact the Menasha City Clerk at 967-5117 24 hours in advance of the meeting for the City to arrange special accommodations."

CITY OF MENASHA
Board of Public Works Meeting
Third Floor Council Chambers, 140 Main St., Menasha
 January 15, 2007

DRAFT**MINUTES**
 Back
  Print
I. ROLL CALL/EXCUSED ABSENCES

A. -

Item Action:
 None
Motions

Motion Type	Motion Text	Made By	Seconded By	Motion Result
-------------	-------------	---------	-------------	---------------


Meeting called to order by Chairman Taylor at 8:45 p.m.

Present: Ald. Taylor, Wisneski, Hendricks, Michalkiewicz, Chase, Merkes. Excused: Ald. Pack, Eckstein

Also Present: Mayor Laux, CA/HRD Brandt, Lt. Brunn, DPW Radtke, CDD Keil, PRD Tungate, Comp/Treasurer Stoffel, Clerk Galeazzi and the Press.

II. MINUTES TO APPROVE-MINUTES & COMMUNICATIONS TO RECEIVE**Minutes to approve:**


A. January 2, 2007 Minutes to Approve


[Attachments](#)
Item Action:
 None
Motions

Motion Type	Motion Text	Made By	Seconded By	Motion Result
Move	To approve minutes	Alderman Merkes	Alderman Wisneski	Passed
	Motion carried on voice vote.			

III. ACTION ITEMS

A. **Change Order -- CD Smith Construction, Inc. Water Treatment Plant Modifications; Contract Unit No. M002-940266.02; DEDUCT: \$5,981.00 (Change Order No. 4)**


[Attachments](#)
Item Action:
 None
Motions

Motion Type	Motion Text	Made By	Seconded By	Motion Result
	No Questions or Discussion.			

B. **Payment -- Dorner, Inc.; Nature's Way; Contract Unit No. 2006-08; \$104,729.62 (Payment No. 2)**


[Attachments](#)
Item Action:
 None

DRAFT**Motions**


Motion Type	Motion Text	Made By	Seconded By	Motion Result
-------------	-------------	---------	-------------	---------------

No Questions or Discussion.

C. Request to Reinstall Street Light near 852 Fifth Street; Pole No. 2067**Item Action:**
None**Motions**


Motion Type	Motion Text	Made By	Seconded By	Motion Result
-------------	-------------	---------	-------------	---------------

DPW Radtke explained this request was from Ald. Eckstein and a resident. He checked out the situation and recommends reinstalling this light to maintain consistent light spacing along Fifth Street

D. Authorization to Execute Agreement for Engineering Services; Wastewater Collection System Rehabilitation Improvements; Phase 3

[Attachments](#)
Item Action:
 None
Motions

Motion Type	Motion Text	Made By	Seconded By	Motion Result
-------------	-------------	---------	-------------	---------------

DPW Radtke explained this is an amendment to Phase 3 of the project. Staff will be able to do some of the engineering work, which will reduce costs.

IV. ORDINANCES AND RESOLUTIONS**A. Resolution No. R - 3- 07 Declaring Official Intent to Reimburse Expenditures for Clean Water Fund Loan Program**

[Attachments](#)
Item Action:
 None
Motions

Motion Type	Motion Text	Made By	Seconded By	Motion Result
-------------	-------------	---------	-------------	---------------

DPW Radtke explained this resolution needs to be in place to get reimbursed for funds advanced for the Clean Water Fund Loan Program.

V. ADJOURNMENT**A. Adjournment****Item Action:**
None**Motions**

Motion Type	Motion Text	Made By	Seconded By	Motion Result
-------------	-------------	---------	-------------	---------------

Move	To adjourn at 8:49 p.m. Motion carried on voice vote.	Alderman Michalkiewicz	Alderman Hendricks	Passed
------	--	------------------------	--------------------	--------

Deborah A. Galeazzi
 Deborah A. Galeazzi
 City Clerk



City of Menasha • Department of Public Works

January 31, 2007

Board of Public Works
City of Menasha
Menasha, WI 54952

RE: Traffic Study Report – Southfield Drive and Deer Haven Drive

Members of the Board:

The Board of Public Works directed that a traffic study be made for determining the need for a traffic control signage change at the intersection of Southfield Drive and Deer Haven Drive. In September of 2006 the Board authorized a 90 day trial of a four way stop at the intersection due to speed and safety concerns brought to the Board by local residents. Prior to the 90 day trial of the four way stop signs, the intersection was regulated by yield signs that were on Deer Haven Drive.

Attached to this letter is a copy of the Engineering Department's Traffic Study. The Traffic Study provides information relating to traffic volume, accident history and Manual on Uniform Traffic Control Devices (MUTCD) warrants for installation of Multiway Stop Applications.

In reviewing the information and from observation at the intersection, there is no apparent need to change the pre-trial period existing yield signs on Deer Haven Drive to a four way stop at the intersection with Southfield Drive. Based on the traffic study, I recommend that the previously authorized yield signs (Traffic Study from 2004) on Deer Haven Drive at Southfield Drive be reestablished.

Sincerely,

A handwritten signature in purple ink, which appears to read "Tim J. Montour".

Tim J. Montour
Engineering Supervisor

Attachments

C: Street file

Traffic Study – Southfield Drive @ Deer Haven Drive

Reason for Study

Under the direction of the Board of Public Works at the September 5, 2006 meeting, four way stop signs were put at this location for a 90 day trial period. The request for the stop signs was made by residents in the area because of speed and safety issues. That 90 day trial has ended and this study is a follow up recommendation to the request to make the four way stop signs permanent.

Physical Conditions

Southfield Drive is a north-south collector street that is 37' back of curb to back of curb. The street has a bituminous concrete surface with concrete curb and gutter and a five foot concrete sidewalk on each side and a 6.5' grass terrace. The road right of way width is 60' and the area is single family residential.

Deer Haven Drive at this location is, for the most part, an east-west local street that is 33' back of curb to back of curb. The street has a bituminous concrete surface with concrete curb and gutter and a 13.5' grass terrace. The road right of way width is 60' and the area is single family residential.

Southfield Drive from the north is on a long sweeping curve but the angle of the intersecting streets is not far from perpendicular to each other (see attached). With the typical residential setbacks, sight distance at the intersection is good with the only obstructions being mailboxes, street lights and parked vehicles in the roadway. Prior to the 90 day trial period for the four way stop signs, the intersection was regulated by yield signs on Deer Haven Drive at Southfield Drive. These yield signs were put up after a Traffic Study was done in 2004. At that time the request was for yield or stop signs on Deer Haven Dr. due to an accident in January of 2004.

Criteria Used from MUTCD

Section 1A.06 Uniformity of Traffic Control Devices

Support:

Uniformity of devices simplifies the task of the road user because it aids in recognition and understanding, thereby reducing perception/reaction time. Uniformity assists road users, law enforcement officers, and traffic courts by giving everyone the same interpretation. Uniformity assists public highway officials through efficiency in manufacture, installation, maintenance, and administration. Uniformity means treating similar situations in a similar way. The use of uniform traffic control devices does not, in itself, constitute uniformity. A standard device used where it is not appropriate is as objectionable as a nonstandard device; in fact, this might be worse, because such misuse might result in disrespect at those locations where the device is needed and appropriate.

Section 1A.07 Responsibility for Traffic Control Devices

Standard:

The responsibility for the design, placement, operation, maintenance, and uniformity of traffic control devices shall rest with the public agency or the official having jurisdiction. 23 CFR 655.603 adopts the Manual on Uniform Traffic Control Devices as the national standard for all traffic control devices installed on any street, highway, or bicycle trail open to public travel. When a State or other Federal agency manual or supplement is required, that manual or supplement shall be in substantial conformance with the national Manual on Uniform Traffic Control Devices.

23 CFR 655.603 also states that traffic control devices on all streets and highways open to public travel in each State shall be in substantial conformance with standards issued or endorsed by the Federal Highway Administrator.

Support:

The "Uniform Vehicle Code" (see Section 1A.11) has the following provision in Section 15-104 for the adoption of a uniform Manual:

"(a) The [State Highway Agency] shall adopt a manual and specification for a uniform system of traffic control devices consistent with the provisions of this code for use upon highways within this State. Such uniform system shall correlate with and so far as possible conform to the system set forth in the most recent edition of the Manual on Uniform Traffic Control Devices for Streets and Highways, and other standards issued or endorsed by the Federal Highway Administrator."

"(b) The Manual adopted pursuant to subsection (a) shall have the force and effect of law."

Additionally, States are encouraged to adopt Section 15-116 of the "Uniform Vehicle Code," which states that, "No person shall install or maintain in any area of private property used by the public any sign, signal, marking or other device intended to regulate, warn, or guide traffic unless it conforms with the State manual and specifications adopted under Section 15-104."

Section 1A.08 Authority for Placement of Traffic Control Devices

Standard:

Traffic control devices, advertisements, announcements, and other signs or messages within the highway right-of-way shall be placed only as authorized by a public authority or the official having jurisdiction, for the purpose of regulating, warning, or guiding traffic.

When the public agency or the official having jurisdiction over a street or highway has granted proper authority, others such as contractors and public utility companies shall be permitted to install temporary traffic control devices in temporary traffic control zones. Such traffic control devices shall conform with the Standards of this Manual.

Guidance:

Any unauthorized traffic control device or other sign or message placed on the highway right-of-way by a private organization or individual constitutes a public nuisance and should be removed. All unofficial or nonessential traffic control devices, signs, or messages should be removed.

Standard:

All regulatory traffic control devices shall be supported by laws, ordinances, or regulations.

Support:

Provisions of this Manual are based upon the concept that effective traffic control depends upon both appropriate application of the devices and reasonable enforcement of the regulations.

Section 1A.09 Engineering Study and Engineering Judgment

Standard:

This Manual describes the application of traffic control devices, but shall not be a legal requirement for their installation.

Guidance:

The decision to use a particular device at a particular location should be made on the basis of either an engineering study or the application of engineering judgment. Thus, while this Manual provides Standards, Guidance, and Options for design and application of traffic control devices, this Manual should not be considered a substitute for engineering judgment.

Engineering judgment should be exercised in the selection and application of traffic control devices, as well as in the location and design of the roads and streets that the devices complement. Jurisdictions with responsibility for traffic control that do not have engineers on their staffs should seek engineering assistance from others, such as the State transportation agency, their County, a nearby large City, or a traffic engineering consultant.

2003 Edition Page 1A-3

Sect. 1A.07 to 1A.09

Traffic Count

A traffic count was taken on January 11, 2007 from 7:00 am to 6:00 pm. Results are as follows;

Southfield Drive – Southbound

Total vehicles (7 am to 6 pm) - 275

Highest one hour count – 65 from 4:00 to 5:00 pm

Southfield Drive - Northbound

Total vehicles (7 am to 6 pm) - 186

Highest one hour count – 33 from 4:00 to 5:00 pm

Deer Haven Drive – Westbound

Total vehicles (7 am to 6 pm) - 67

Highest one hour count – 14 from 7:00 to 8:00 am

Deer Haven Drive - Eastbound

Total vehicles (7 am to 6 pm) - 28

Highest one hour count – 6 from 7:00 to 8:00 am and 6 from 3:00 to 4:00 pm

Pedestrians

A total of 35 pedestrians crossed at the intersection (all directions) between 7:00 am and 6:00 pm with the highest number being 11 between 5:00 and 6:00 pm.

Accident History

Total of four (4) accidents in the vicinity of the intersection since 2001 (see attached)

Guidance Multiway Stop Applications (MUTCD Sec. 2B.07)

Section 2B.07 Multiway Stop Applications

Support:

*Multiway stop control can be useful as a safety measure at intersections if certain traffic conditions exist. Safety concerns associated with multiway stops include pedestrians, bicyclists, and all road users expecting other road users to stop. Multiway stop control is used where the volume of traffic on the intersecting roads is approximately equal. **(Warrant Not Satisfied – See Traffic Count)***

The restrictions on the use of STOP signs described in Section 2B.05 also apply to multiway stop applications.

Section 2B.05 STOP Sign Applications

Guidance:

STOP signs should be used if engineering judgment indicates that one or more of the following conditions exist:

*A. Intersection of a less important road with a main road where application of the normal right-of-way rule would not be expected to provide reasonable compliance with the law; **(Warrant Satisfied – Yield Sign Installation in 2004 – See “Yield Reference” Below)***

*B. Street entering a through highway or street; **(Warrant Not Satisfied)***

*C. Unsignalized intersection in a signalized area; and/or **(Not Applicable)***

*D. **High speeds**, restricted view, or crash records indicate a need for control by the STOP sign **(Warrant Not Satisfied - See “Guidance” below).***

Standard:

Because the potential for conflicting commands could create driver confusion, STOP signs shall not be installed at intersections where traffic control signals are installed and operating except as noted in Section 4D.01.

Portable or part-time STOP signs shall not be used except for emergency and temporary traffic control zone purposes.

Guidance:

STOP signs should not be used for speed control.

STOP signs should be installed in a manner that minimizes the numbers of vehicles having to stop. At intersections where a full stop is not necessary at all times, consideration should be given to using less restrictive measures such as YIELD signs (see Section 2B.08).

Section 2B.07 Multiway Stop Applications (continued)

Guidance:

The decision to install multiway stop control should be based on an engineering study.

The following criteria should be considered in the engineering study for a multiway STOP sign installation:

*A. Where traffic control signals are justified, the multiway stop is an interim measure that can be installed quickly to control traffic while arrangements are being made for the installation of the traffic control signal. **(Not Applicable)***

*B. A crash problem, as indicated by 5 or more reported crashes in a 12-month period that are susceptible to correction by a multiway stop installation. Such crashes include right- and left-turn collisions as well as right-angle collisions. **(Warrant Not Satisfied – See Accident History)***

C. Minimum volumes:

*1. The vehicular volume entering the intersection from the major street approaches (total of both approaches) averages at least 300 vehicles per hour for any 8 hours of an average day, and **(Warrant Not Satisfied – See Traffic Count)***

2. The combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches (total of both approaches) averages at least 200 units per hour for the same 8 hours, with an average delay to minor-street vehicular traffic of at least 30 seconds per vehicle during the highest hour, but **(Warrant Not Satisfied – See Traffic Count)**

3. If the 85th-percentile approach speed of the major-street traffic exceeds 65 km/h or exceeds 40 mph, the minimum vehicular volume warrants are 70 percent of the above values. **(Warrant Not Satisfied – See Speed Report from Police Department)**

D. Where no single criterion is satisfied, but where Criteria B, C.1, and C.2 are all satisfied to 80 percent of the minimum values. Criterion C.3 is excluded from this condition. **(Warrant Not Satisfied)**

Option:

Other criteria that may be considered in an engineering study include:

A. The need to control left-turn conflicts; **(Warrant Not Satisfied)**

B. The need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes; **(Warrant Not Satisfied – See Traffic and Pedestrian Count)**

C. Locations where a road user, after stopping, cannot see conflicting traffic and is not able to reasonably safely negotiate the intersection unless conflicting cross traffic is also required to stop; and **(Warrant Not Satisfied – No Vision Issues)**

D. An intersection of two residential neighborhood collector (through) streets of similar design and operating characteristics where multiway stop control would improve traffic operational characteristics of the intersection. **(Warrant Not Satisfied)**

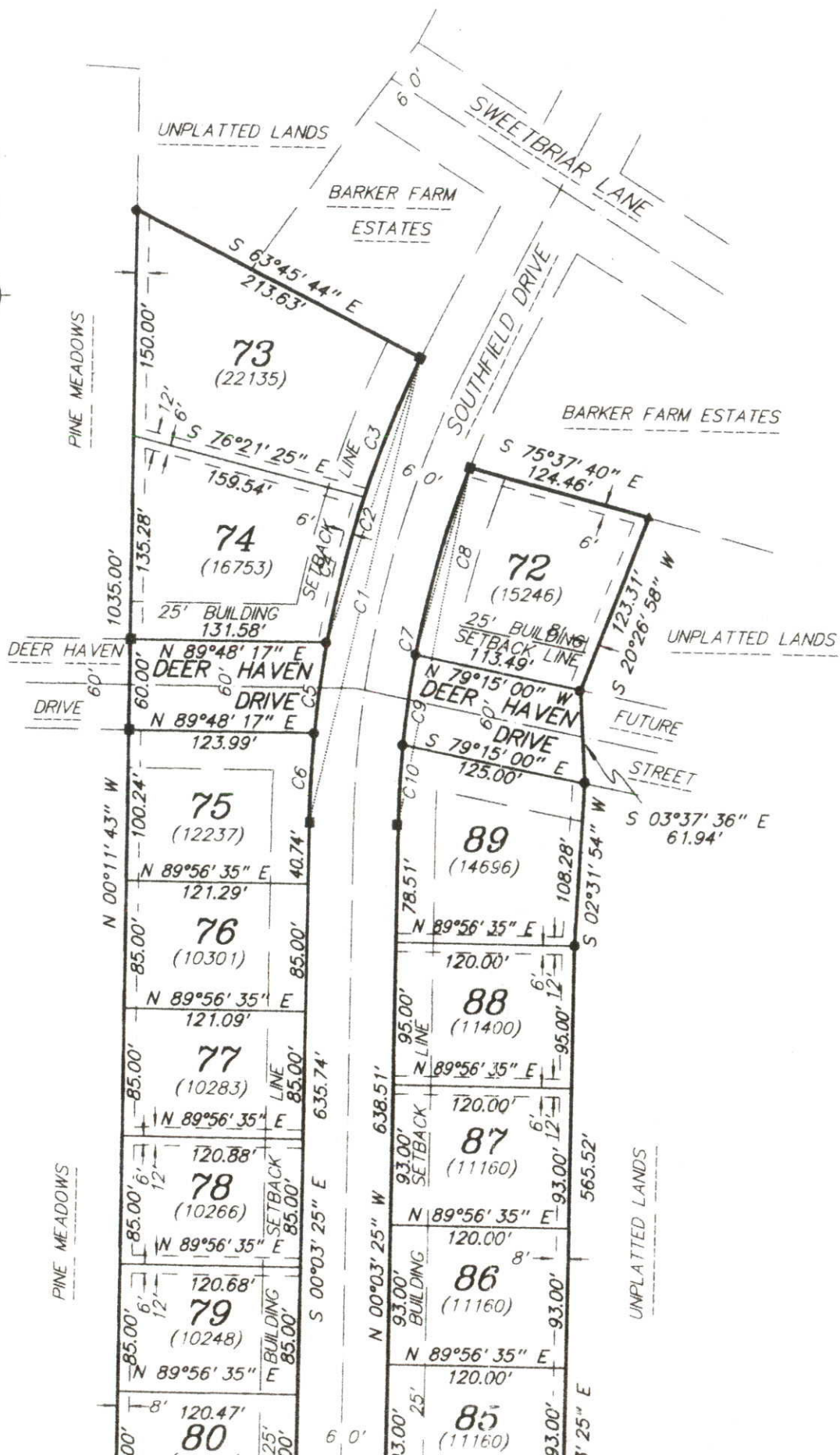
Observations

While gathering information in the field at the intersection location and while doing the Traffic Count a number of observations were made;

- The majority of the vehicular traffic observed is local to the neighborhood
- The majority of the vehicles observed at the four-way stop did not come to a complete stop at the stop signs. Many local vehicles (living within sight of the intersection) rolled through the stop signs after observing no conflict in traffic and the intersection was clear
- Many vehicles accelerated up to the intersection very quickly, decelerated and accelerated while leaving the intersection quickly. The “snapshot in time” at the four-way stop certainly slowed the vehicle but while it approached and left the intersection it was observed to be over the speed limit. This was verified by speeds we observed with the radar gun. Of the total vehicles observed, 82% were driving above the speed limit approaching or leaving the intersection with a maximum speed of 42 mph.
- One vehicle from the Chelsea Ct. area turned onto Deer Haven Dr. (westbound); did not stop for the stop sign; proceeded northbound on Southfield; turned to go eastbound on Sweetbriar; returned a short time later to turn southbound on Southfield; accelerated quickly and went through the stop sign (not even slowing) and continued southbound on Southfield. This was observed between 7:00 and 7:30 am.
- Many of the residents dropping off children for the school bus parked within 25' of the intersection; causing vision issues.
- At approximately 3:45 pm a school bus was stopped on Southfield Dr. at Sweetbriar with its lights flashing. The “Stop” sign on the bus was not out. A Deer Haven Dr. resident went past the school bus without slowing and proceeded on. They may not have broken the law, but if safety is an issue, the local residents need to police each other and themselves.
- In gathering information for the Traffic Study, the majority of the concerns brought to our attention are speed related. As was noted previously by the MUTCD **STOP signs should not be used for speed control.**

Recommendations

As the Traffic Study points out, Guidance/Warrants for a Multiway Stop Application from the MUTCD are not satisfied at this intersection. If excessive speed is a concern, it can better be handled through enforcement or possibly the use of speed humps in the area. Speed humps are utilized in surrounding communities and even though snow removal is difficult, they seem to be well received. The intersection better warrants the existing yield signs that were placed on Deer Haven Dr. as part of the Traffic Study done in 2004.



LAW ENFORCEMENT - REPORT 9A

CITY OF MENASHA
JANUARY - DECEMBER 2001 HIGH ACCIDENT LISTING
ROAD SOUTHFIELD DR --- RATE INDEX 1.06

ACCIDENT DATE	DOCUMENT NUMBER	ACCIDENT DAY	ACCIDENT TIME	ACCIDENT SEVERITY	INT DIS	INT DIR	AT STREET	ALCOHOL SPEED	ALC & SPEED	ROAD CONDITION	MANNER OF COLLISION	MICROFILM NUMBER	UNIT
10/27/2001	7468352	SAT	11-MIDNITE	INJURY	5	N	DREAMFIELD LN	Y	OTHER	NO COLL W/VEH IN TRANS	NO COLL W/VEH IN TRANS	01633050900	1
ACCIDENT DATE	DOCUMENT NUMBER	WHAT DRIVER WAS DOING	CITATION 1	CAUSING INJURY BY RECKLESS DRI	CITATION 2	DRIVER PCC1	DRIVER PCC2	DRIVER PCC3	DRIVER PCC4	DRIVER PCC5			
10/27/2001	7468352	GOING STRAIGHT LEGALLY PARKED				EXCEED SPEED LIMIT NOT APPLICABLE	SPEED TOO FAST/COND FAILURE TO CONTROL						2

LAW ENFORCEMENT - REPORT 8

CITY OF MENASHA
JANUARY - DECEMBER 2001 SECTOR ANALYSIS

ROAD	CRASHES IN CONSTRUCTION ZONES	PROP DMGE CRASHES	INJURY CRASHES	FATAL CRASHES	TOTAL CRASHES	FREQUENCY RATING	CRASHES W/SPEED INVOLVED	CRASHES W/ALCOHOL INVOLVED	CRASHES W/ONLY OTHER PCCS INVOLVED	CRASHES W/SPEED AND ALC. INVOLVED	TOTAL CRASHES W/IDENT CAUSES	RATE/INDEX
047	0	11	15	0	26	86	1	1	22	1	25	5.16
RACINE ST	0	9	13	0	22	74	2	3	16	1	22	4.90
THIRD ST	0	17	18	0	35	107	1	0	32	0	33	3.96
PARKING LOT	0	0	3	0	3	15	0	0	1	2	3	2.19
LONDON ST	0	16	4	0	20	36	1	0	18	0	19	1.49
MANITOWOC RD	0	3	2	0	5	13	0	0	4	1	5	1.30
SOUTHFIELD DR	0	2	1	0	3	7	0	1	1	1	3	1.16
SEVENTH ST	1	0	1	0	1	5	1	0	0	0	1	1.06
MIDWAY RD	0	1	3	0	4	16	0	1	3	0	4	1.04
CTH AP MIDWAY RD	0	9	4	0	13	29	1	1	8	0	10	0.94
2 ST	0	7	3	0	10	22	0	0	10	0	10	0.83
GREEN BAY ST	0	0	1	0	1	5	0	1	0	0	1	0.63
MILWAUKEE ST	0	0	1	0	1	5	0	1	0	0	1	0.63
NICOLET BLVD	0	6	0	0	6	6	2	0	4	0	6	0.58
MAIN ST	0	3	2	0	5	13	0	0	5	0	5	0.49
AIRPORT RD	0	2	2	0	4	12	0	0	4	0	4	0.45
010	0	1	2	0	3	11	0	0	3	0	3	0.41
DEPERE ST	0	5	1	0	6	10	0	0	6	0	6	0.38
PRIVATE PROPERTY	0	0	2	0	2	10	0	0	2	0	2	0.38
FIRST ST	0	2	1	0	3	7	0	1	2	0	3	0.35
NINTH ST	0	4	0	0	4	4	1	0	3	0	4	0.33
SIXTH ST	0	4	0	0	4	4	1	0	3	0	4	0.33
1 ST	0	1	1	0	2	6	0	1	1	0	2	0.31
9 ST	0	1	1	0	2	6	0	0	2	0	2	0.23
CTH AP / MIDWAY RD	0	1	1	0	2	6	0	0	2	0	2	0.23
LUCERNE DR	0	1	1	0	2	6	0	0	2	0	2	0.23
MELISSA ST	0	1	1	0	2	6	0	0	2	0	2	0.23
GROVE ST	0	2	0	0	2	6	1	0	0	0	2	0.21
441	0	0	1	0	1	5	0	0	1	0	1	0.19
8 ST	0	0	1	0	1	5	0	0	1	0	1	0.19
AHNAIP ST	0	0	1	0	1	5	0	0	1	0	1	0.19
APPLETON ST	0	0	1	0	1	5	0	0	1	0	1	0.19
BROAD	0	0	1	0	1	5	0	0	1	0	1	0.19
CTH CB	0	0	1	0	1	5	0	0	1	0	1	0.19
CTH LP	0	0	1	0	1	5	0	0	1	0	1	0.19
DE PERE ST	0	0	1	0	1	5	0	0	1	0	1	0.19
FIELDCREST DR	0	0	1	0	1	5	0	0	1	0	1	0.19
KAUKAUNA ST	0	0	1	0	1	5	0	0	1	0	1	0.19
ROOSEVELT ST	0	0	1	0	1	5	0	0	1	0	1	0.19
3 ST	0	1	0	0	1	5	0	0	1	0	1	0.13
ICE ST	0	1	0	0	1	1	0	1	0	0	1	0.13
BROAD ST	0	1	0	0	1	1	0	1	0	0	1	0.13
TAYCO ST	0	3	0	0	3	3	0	0	3	0	3	0.11
IDA ST	0	2	1	0	3	7	0	0	2	0	2	0.08
WATER ST	0	2	0	0	2	2	0	0	2	0	2	0.08
BRIARWOOD DR	0	1	0	0	1	1	0	0	1	0	1	0.04
CTH BB	0	1	0	0	1	1	0	0	1	0	1	0.04
EARL ST	0	1	0	0	1	1	0	0	1	0	1	0.04
EIGHTH ST	0	1	0	0	1	1	0	0	1	0	1	0.04
JENNIE ST	0	1	0	0	1	1	0	0	1	0	1	0.04
KARGUS DR	0	1	0	0	1	1	0	0	1	0	1	0.04
KONEMAC ST	0	1	0	0	1	1	0	0	1	0	1	0.04
LUSH ST	0	1	0	0	1	1	0	0	1	0	1	0.04
RIVER ST	0	1	0	0	1	1	0	0	1	0	1	0.04
SECOND ST	0	1	0	0	1	1	0	0	1	0	1	0.04
VALLEY RD	0	1	0	0	1	1	0	0	1	0	1	0.04
WALBRUN ST	0	1	0	0	1	1	0	0	1	0	1	0.04
MARSAH ST	0	1	0	0	1	1	0	0	1	0	1	0.04
	0	1	0	0	1	1	0	0	1	0	1	0.04
	1	134	97	0	231	619	12	13	191	6	222	33.74

SECTOR - A SECTION OF ROAD THAT RUNS WITHIN THE BOUNDARIES OF A MUNICIPALITY.

RATE INDEX - THE EXPECTED DECREASE IN THE TOTAL FREQUENCY RATING
BASED ON THE NUMBER OF CRASHES OCCURRING IN EACH SECTOR.FREQUENCY RATING - A VALUE GIVEN TO EACH SECTOR BASED ON THE NUMBER OF CRASHES
AND THE SEVERITY OF EACH CRASH = (5 * FATAL) + (5 * INJURY) + PROPERTY DAMAGE.
THIS REPORT INCLUDES INTERSECTION, NON-INTERSECTION, PARKING LOT AND PRIVATE PROPERTY ACCIDENTS.

t:\cityset\

DETAILS OF ACCIDENT HISTORY

PERIOD STUDIED: FROM: _____ TO: _____ 0 MONTHS		# VEHICLES	S E V E R I T Y		L I G H T C O N D		R O A D C H A R		S U R F A C E		W E A T H E R		ROUTE NUMBER/STREET NAME: Southfield Dr. LOCATION block G MUNICIPALITY: Menasha COUNTY: Calumet REFERENCE MARKERS / NODES: Dreamfield Ln - Deer Haven Dr				CASE No. FILE: southfield_b/G BY: cr DATE: 1/8/2007				
No.	DATE	TIME	CONTRIB. FACTORS										ACC. TYPE		ACCIDENT DESCRIPTION				KEY #		
1	12/29/2005	11:45	1	PDO	1	4	1	2	4	veh. 1 sweved off road, struck 2 mailboxes, returned to road				FixO							

ACCIDENT SUMMARY SHEET

ROUTE: *Southfield Dr.*

LOCATION: *block G*

MUNICIPALITY: *Menasha*

COUNTY: *Calumet*

TIME PERIOD COVERED: -

REFERENCE MARKERS / NODES: *Dreamfield Ln - Deer Haven Dr*

REMARKS: *All Accidents*

DATE: *1/8/2007*

TIME OF DAY			# ACC	%	DIRECTION			# ACC	%			
6 AM - 10 AM			0	0.0%	North			1	100.0%			
10 AM - 4 PM			1	100.0%	South			0	0.0%			
4 PM - 7 PM			0	0.0%	East			0	0.0%			
7 PM - 12 AM			0	0.0%	West			0	0.0%			
12 AM - 6 AM			0	0.0%	Total			1				
Unspecified			0	0.0%				0	0.0%			
Total			1		ACCIDENT TYPE			# ACC	%			
WEATHER			# ACC			# ACC			%			
			# ACC			# ACC			%			
			Clear			0	0.0%	Pedestrian			0	0.0%
			Cloudy			1	100.0%	Bicycle			0	0.0%
			Rain			0	0.0%	Parked Vehicle			0	0.0%
			Snow			0	0.0%	Backing			0	0.0%
			Sleet/Hail/Freezing Rain			0	0.0%	Run Off The Road			0	0.0%
			Fog/Smog/Smoke			0	0.0%	Animal			0	0.0%
			Unspecified			0	0.0%	Other			0	0.0%
Total			1		Unspecified			0	0.0%			
Total			1		Total			1				

SURFACE			# ACC	%	ACCIDENT SEVERITY			# ACC	%
Dry			1	100.0%	Fatal			0	0.0%
Wet			0	0.0%	Injury			0	0.0%
Mud/Slush			0	0.0%	Property Damage			1	100.0%
Snow/Ice			0	0.0%	Non-Reportable			0	0.0%
Unspecified			0	0.0%	Total			1	
Total			1						

TIME OF YEAR			# ACC	%	TYPE OF VEHICLE			# ACC	%
Winter (Dec-Feb)			1	100.0%	Passenger Cars			1	100.0%
Spring (Mar-May)			0	0.0%	Commercial Vehicles			0	0.0%
Summer (Jun-Aug)			0	0.0%	Total			1	
Fall (Sep-Nov)			0	0.0%					
Total			1						

DAY OF WEEK			# ACC	%	LIGHT CONDITION			# ACC	%
Sunday			0	0.0%	Daylight			1	100.0%
Monday			0	0.0%	Dawn/Dusk			0	0.0%
Tuesday			0	0.0%	Night			0	0.0%
Wednesday			0	0.0%	Unspecified			0	0.0%
Thursday			1	100.0%	Total			1	
Friday			0	0.0%					
Saturday			0	0.0%					
Total			1						

SUMMARY OF ACCIDENT SEVERITY BY YEAR:

	0
Fatal Accidents	0
Injury Accidents	0
Property Damage Accidents	0
Non-Reportable Accidents	0
Total Accidents	0

COLLISION DIAGRAM

Key Number =

MUNICIPALITY: Menasha COUNTY: Calumet
 INTERSECTION: Southfield Dr.
 PERIOD: 0 YEARS 0 MONTHS FROM TO

FILE: southfield_bIG
 CASE # :
 BY: cr DATE: 1/8/2007

Northbound 

Southfield Dr.

Southfield Dr.



SYMBOLS

	MOVING VEHICLE	P	PEDESTRIAN
	TURNING VEHICLE	B	BICYCLIST
	BACKING VEHICLE	A	ANIMAL
	PARKED VEHICLE		FIXED OBJECT
	RECORD NUMBER		Fatal

MANNER OF COLLISION

	REAR END		HEAD ON
	LEFT TURN		RIGHT TURN
	LEFT TURN		RIGHT TURN
	OVERTAKE		RIGHT ANGLE
	OUT OF CONTROL		SIDE SWIPE

DETAILS OF ACCIDENT HISTORY

PERIOD STUDIED: FROM: _____ TO: _____ 0 MONTHS		# VEHICLES	S E V E R I T Y		L I G H T C O N D		R O A D C H A R		S U R F A C E		W E A T H E R		ROUTE NUMBER/STREET NAME: Southfield Dr. LOCATION at Deerhaven Dr. MUNICIPALITY: Menasha COUNTY: Calumet REFERENCE MARKERS / NODES: -				CASE No. FILE: southfield_deerh BY: cr DATE: 1/8/2007			
No.	DATE	TIME	CONTRIB. FACTORS										ACC. TYPE	ACCIDENT DESCRIPTION				KEY #		
1	1/9/2002	15:50	1	PDO	1	4	1	1	1	1	3	5	FixO	unit 1 (school bus) backed into light post, knocking it over						
2	1/29/2004	17:17	2	PDO	3	1	1	1	1	7	4	Rang	neither unit stopped at uncontrolled intersection causing wreck							

ACCIDENT SUMMARY SHEET

ROUTE: *Southfield Dr.*

LOCATION: *at Deerhaven Dr.*

MUNICIPALITY: *Menasha*

COUNTY: *Calumet*

TIME PERIOD COVERED: -

REFERENCE MARKERS / NODES: -

REMARKS: *All Accidents*

DATE: *1/8/2007*

TIME OF DAY	# ACC	%	DIRECTION	# ACC	%	DIRECTION	# ACC	%
6 AM - 10 AM	0	0.0%	North	2	66.7%	Northeast	0	0.0%
10 AM - 4 PM	1	50.0%	South	0	0.0%	Northwest	0	0.0%
4 PM - 7 PM	1	50.0%	East	0	0.0%	Southeast	0	0.0%
7 PM - 12 AM	0	0.0%	West	1	33.3%	Southwest	0	0.0%
12 AM - 6 AM	0	0.0%				Unspecified	0	0.0%
Unspecified	0	0.0%						
Total	2		Total	3				

WEATHER	# ACC	%	ACCIDENT TYPE	# ACC	%	ACCIDENT TYPE	# ACC	%
Clear	2	100.0%	Rear End	0	0.0%	Pedestrian	0	0.0%
Cloudy	0	0.0%	Overtake	0	0.0%	Bicycle	0	0.0%
Rain	0	0.0%	Right Angle	1	50.0%	Parked Vehicle	0	0.0%
Snow	0	0.0%	Left Turn	0	0.0%	Backing	0	0.0%
Sleet/Hail/Freezing Rain	0	0.0%	Right Turn	0	0.0%	Run Off The Road	0	0.0%
Fog/Smog/Smoke	0	0.0%	Fixed Object	1	50.0%	Animal	0	0.0%
Unspecified	0	0.0%	Head On	0	0.0%	Other	0	0.0%
			Sideswipe	0	0.0%	Unspecified	0	0.0%
Total	2		Total	2				

SURFACE	# ACC	%
Dry	2	100.0%
Wet	0	0.0%
Mud/Slush	0	0.0%
Snow/Ice	0	0.0%
Unspecified	0	0.0%
Total	2	

ACCIDENT SEVERITY	# ACC	%
Fatal	0	0.0%
Injury	0	0.0%
Property Damage	2	100.0%
Non-Reportable	0	0.0%
Total	2	

TIME OF YEAR	# ACC	%
Winter (Dec-Feb)	2	100.0%
Spring (Mar-May)	0	0.0%
Summer (Jun-Aug)	0	0.0%
Fall (Sep-Nov)	0	0.0%
Total	2	

TYPE OF VEHICLE	# ACC	%
Passenger Cars	2	66.7%
Commercial Vehicles	1	33.3%
Total	3	

DAY OF WEEK	# ACC	%
Sunday	0	0.0%
Monday	0	0.0%
Tuesday	0	0.0%
Wednesday	1	50.0%
Thursday	1	50.0%
Friday	0	0.0%
Saturday	0	0.0%
Total	2	

LIGHT CONDITION	# ACC	%
Daylight	1	50.0%
Dawn/Dusk	1	50.0%
Night	0	0.0%
Unspecified	0	0.0%
Total	2	

SUMMARY OF ACCIDENT SEVERITY BY YEAR:

	0
Fatal Accidents	0
Injury Accidents	0
Property Damage Accidents	0
Non-Reportable Accidents	0
Total Accidents	0

COLLISION DIAGRAM

Key Number =

MUNICIPALITY: Menasha COUNTY: Calumet

FILE: southfield_deerh

INTERSECTION: Southfield Dr.

CASE # : _____

PERIOD: 0 YEARS 0 MONTHS FROM _____ TO _____

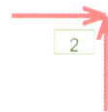
BY: cr DATE: 1/8/2007

Deer Haven Dr.

Northbound 

Southfield Dr.

Southfield Dr.



Deer Haven Dr

SYMBOLS

	MOVING VEHICLE	P	PEDESTRIAN
	TURNING VEHICLE	B	BICYCLIST
	BACKING VEHICLE	A	ANIMAL
	PARKED VEHICLE		FIXED OBJECT
	RECORD NUMBER		Fatal

MANNER OF COLLISION

	REAR END		HEAD ON
	LEFT TURN		RIGHT TURN
	LEFT TURN		RIGHT TURN
	OVERTAKE		RIGHT ANGLE
	OUT OF CONTROL		SIDE SWIPE

Traffic Study - Southfield Drive @ Deer Haven Drive

Traffic Count

April 15, 2004 to April 21, 2004

Average 24 hour count from 12 noon to 12 noon - 1065 vehicles

Speed Study

Observed between 7:30 and 8:30 a.m. on April 21, 2004.

Total vehicles - 68

20 to 25 mph - 22 vehicles or 32%

26 to 30 mph - 40 vehicles or 59%

31 to 35 mph - 6 vehicles or 9%

Accident History

Total of four (4) accidents in the last six years

1998 - One (1) accident on Southfield Drive

2001 - One (1) accident on Southfield Drive between Dreamfield and Deer Haven
(Street construction at time of accident)

2002 - One (1) accident on Southfield Drive

2004 - One (1) accident on Southfield Drive at Deer Haven Drive

Guidance for Stop Sign Applications (MUTCD)

- A. Intersection of a less important road with a main road where application of the normal right of way rule would not be expected to provide reasonable compliance with the law;
- B. Street entering a through highway or street;
- C. Unsignalized intersection in a signalized area;
- D. High speeds, restricted view, or crash records indicate a need for control by the STOP sign;

Guidance for Yield Sign Applications (MUTCD)

- A. When the ability to see all potentially conflicting traffic is sufficient to allow a road user traveling at the posted speed, the 85th percentile speed, or the statutory speed to pass through the intersection or to stop in a reasonably safe manner.
- B. If controlling a merge-type movement on the entering roadway where acceleration geometry and/or sight distance is not adequate for merging traffic operations.
- C. The second crossroad of a divided highway, where the median width at the intersection is 9 m (30 ft) or greater. In this case, a STOP sign may be installed at the entrance to the first roadway of a divided highway, and a YIELD sign may be installed at the entrance to the second roadway.
- D. An intersection where a special problem exists and where engineering judgment indicates the problem to be susceptible to correction by the use of the YIELD sign.

Southfield Drive Speed Statistics

Survey Dates: September 11, 2006 - September 18, 2006

Total Vehicles: 8,152

Average Speed: 23 MPH

50th Percentile: 23 MPH (50% of all the vehicles were traveling at this speed or below it)

85th Percentile: 28 MPH (85% of all the vehicles were traveling at this speed or below it)

98th Percentile 33 MPH (98% of all the vehicles were traveling at this speed or below it)

Highest Speed: 49 MPH

6 vehicles were traveling 40MPH or higher

- Based on the numbers from the survey it does not appear that speeding is a significant problem. The highest speed reported can be discarded; this anomaly is seen in all speed surveys. In this case it appears someone was trying to show off or see how high they get the radar display. As for the speeds over 40MPH, it is comparable to other surveys on city streets in Menasha.



City of Menasha • Department of Public Works

January 31, 2007

Board of Public Works
City of Menasha
Menasha, WI 54952

RE: Traffic Study Report – First Street and Appleton Street

Members of the Board:

The Board of Public Works directed that a traffic study be made for determining the need for a traffic control signage change at the intersection of First Street and Appleton Street. In September of 2006 the Board authorized a 90 day trial of a four way stop at the intersection due to speed and safety concerns brought to the Board by local residents. Prior to the 90 day trial of the four way stop signs, the intersection was regulated by stop signs that were on Appleton Street.

Attached to this letter is a copy of the Engineering Department's Traffic Study. The Traffic Study provides information relating to traffic volume, accident history and Manual on Uniform Traffic Control Devices (MUTCD) warrants for installation of Multiway Stop Applications. Data gathered at the intersection along with MUTCD warrants do not satisfy the need for four way stop signs at this location.

In reviewing this information and from observation at the intersection, I feel there are extenuating circumstances that need to be addressed. With the encroaching building at the southeast corner and several large trees in the terrace area throughout the area, safety is a valid concern. Using good engineering judgment, I recommend the four way stop signs at this intersection be made permanent.

Sincerely,

A handwritten signature in purple ink, appearing to read "Tim J. Montour".

Tim J. Montour
Engineering Supervisor

Attachments

C: Street file

Traffic Study – First Street @ Appleton Street

Reason for Study

Under the direction of the Board of Public Works at the September 5, 2006 meeting, four way stop signs were put at this location for a 90 day trial period. The request for the stop signs was made by residents in the area due to speed and safety issues. That 90 day trial has ended and this study is a follow up recommendation to the request to make the four way stop signs permanent.

Physical Conditions

First Street is an east-west collector street that is 37' back of curb to back of curb. The street has a bituminous concrete surface with concrete curb and gutter, a five foot concrete sidewalk on each side and a 9.5' grass terrace. The road right of way width is 66' and the area is a mixture of single family and multi-family residential with commercial and St. Mary's Church and School within one block of the intersection.

Appleton Street at this location is a north-south local street that is 41' back of curb to back of curb. The street has a bituminous concrete surface with concrete curb and gutter, a five foot concrete sidewalk on each side and a 7.5' grass terrace. The road right of way width is 66' and the area is a mixture of single family and multi-family residential with commercial and St. Mary's Church and School within one block of the intersection.

Prior to the 90 day trial period for the four way stop signs, the intersection was regulated with stop signs on Appleton Street. Sight distance at the intersection is limited by a number of concerns. If you are northbound on Appleton Street, there are shrubs located on the property at the SW corner of the intersection. This vision concern could be addressed under Sec. 13-1-53, Vision Clearance at Intersections in the City of Menasha – Code of Ordinances. The building on the SE corner encroaches on the road right of way. According to the American Association of State Highway and Transportation Officials (AASHTO) a stopped motorist needs an intersection sight distance of 335 feet for a passenger vehicle to turn left onto a two lane street that has a design speed of 30 mph. From the decision point (stop sign) at the SE corner there is a clear sight triangle to that 335 foot mark. The passenger vehicle needs to be at the stop sign, in the northbound travel lane to have this clear sight triangle. If the vehicles stops short of the stop sign or is in the east half of the travel lane, that clear sight triangle is not obtained. If the stopped motorist is continuing northbound across First Street the required intersection sight distance is 290 feet. If you are southbound on Appleton Street the sight distance to the east is obstructed by a number of large trees. The stopped motorist can see beyond the 335 feet, but the trees obstruct the view at certain areas of the street.

Criteria Used from MUTCD

Section 1A.06 Uniformity of Traffic Control Devices

Support:

Uniformity of devices simplifies the task of the road user because it aids in recognition and understanding, thereby reducing perception/reaction time. Uniformity assists road users, law enforcement officers, and traffic courts by giving everyone the same interpretation. Uniformity assists public highway officials through efficiency in manufacture, installation, maintenance, and administration. Uniformity means treating similar situations in a similar way. The use of uniform traffic control devices does not, in itself, constitute uniformity. A standard device used where it is not appropriate is as objectionable as a nonstandard device; in fact, this might be worse, because such misuse might result in disrespect at those locations where the device is needed and appropriate.

Section 1A.07 Responsibility for Traffic Control Devices

Standard:

The responsibility for the design, placement, operation, maintenance, and uniformity of traffic control devices shall rest with the public agency or the official having jurisdiction. 23 CFR 655.603 adopts the Manual on Uniform Traffic Control Devices as the national standard for all traffic control devices installed on any street, highway, or bicycle trail open to public travel. When a State or other Federal agency manual or supplement is required, that manual or supplement shall be in substantial conformance with the national Manual on Uniform Traffic Control Devices.

23 CFR 655.603 also states that traffic control devices on all streets and highways open to public travel in each State shall be in substantial conformance with standards issued or endorsed by the Federal Highway Administrator.

Support:

The "Uniform Vehicle Code" (see Section 1A.11) has the following provision in Section 15-104 for the

adoption of a uniform Manual:

“(a) The [State Highway Agency] shall adopt a manual and specification for a uniform system of traffic control devices consistent with the provisions of this code for use upon highways within this State. Such uniform system shall correlate with and so far as possible conform to the system set forth in the most recent edition of the Manual on Uniform Traffic Control Devices for Streets and Highways, and other standards issued or endorsed by the Federal Highway Administrator.”

“(b) The Manual adopted pursuant to subsection (a) shall have the force and effect of law.”

Additionally, States are encouraged to adopt Section 15-116 of the “Uniform Vehicle Code,” which states that, “No person shall install or maintain in any area of private property used by the public any sign, signal, marking or other device intended to regulate, warn, or guide traffic unless it conforms with the State manual and specifications adopted under Section 15-104.”

Section 1A.08 Authority for Placement of Traffic Control Devices

Standard:

Traffic control devices, advertisements, announcements, and other signs or messages within the highway right-of-way shall be placed only as authorized by a public authority or the official having jurisdiction, for the purpose of regulating, warning, or guiding traffic.

When the public agency or the official having jurisdiction over a street or highway has granted proper authority, others such as contractors and public utility companies shall be permitted to install temporary traffic control devices in temporary traffic control zones. Such traffic control devices shall conform with the Standards of this Manual.

Guidance:

Any unauthorized traffic control device or other sign or message placed on the highway right-of-way by a private organization or individual constitutes a public nuisance and should be removed. All unofficial or nonessential traffic control devices, signs, or messages should be removed.

Standard:

All regulatory traffic control devices shall be supported by laws, ordinances, or regulations.

Support:

Provisions of this Manual are based upon the concept that effective traffic control depends upon both appropriate application of the devices and reasonable enforcement of the regulations.

Section 1A.09 Engineering Study and Engineering Judgment

Standard:

This Manual describes the application of traffic control devices, but shall not be a legal requirement for their installation.

Guidance:

The decision to use a particular device at a particular location should be made on the basis of either an engineering study or the application of engineering judgment. Thus, while this Manual provides Standards, Guidance, and Options for design and application of traffic control devices, this Manual should not be considered a substitute for engineering judgment.

Engineering judgment should be exercised in the selection and application of traffic control devices, as well as in the location and design of the roads and streets that the devices complement. Jurisdictions with responsibility for traffic control that do not have engineers on their staffs should seek engineering assistance from others, such as the State transportation agency, their County, a nearby large City, or a traffic engineering consultant.

2003 Edition Page 1A-3

Sect. 1A.07 to 1A.09

Traffic Count

A traffic count was taken on January 17, 2007 from 7:00 am to 6:00 pm. Results are as follows;

Appleton Street – Southbound

Total vehicles (7 am to 6 pm) - 202

Highest one hour count – 37 from 3:00 to 4:00 pm

Appleton Street - Northbound

Total vehicles (7 am to 6 pm) - 224

Highest one hour count – 33 from 5:00 to 6:00 pm

First Street – Westbound

Total vehicles (7 am to 6 pm) - 456

Highest one hour count – 55 from 7:00 to 8:00 am and from 3:00 to 4:00 pm

First Street - Eastbound

Total vehicles (7 am to 6 pm) - 264

Highest one hour count – 38 from 3:00 to 4:00 pm

Pedestrians

A total of 31 pedestrians crossed at the intersection (all directions) between 7:00 am and 6:00 pm with the highest number being 11 between 7:00 and 8:00 am.

Accident History

Total of five (5) accidents in the vicinity of the intersection since 2001 (see attached)

Guidance Multiway Stop Applications (MUTCD Sec. 2B.07)

Section 2B.07 Multiway Stop Applications

Support:

Multiway stop control can be useful as a safety measure at intersections if certain traffic conditions exist.

*Safety concerns associated with multiway stops include pedestrians, bicyclists, and all road users expecting other road users to stop. Multiway stop control is used where the volume of traffic on the intersecting roads is approximately equal. **(Warrant Not Satisfied – See Traffic Count)***

The restrictions on the use of STOP signs described in Section 2B.05 also apply to multiway stop applications.

Section 2B.05 STOP Sign Applications

Guidance:

STOP signs should be used if engineering judgment indicates that one or more of the following conditions exist:

*A. Intersection of a less important road with a main road where application of the normal right-of-way rule would not be expected to provide reasonable compliance with the law; **(Warrant Satisfied – Existing Stop Sign on Appleton Street)***

*B. Street entering a through highway or street; **(Warrant Not Satisfied)***

*C. Unsignalized intersection in a signalized area; and/or **(Not Applicable)***

*D. High speeds, **restricted view**, or crash records indicate a need for control by the STOP sign **(Warrant Satisfied)***

Standard:

Because the potential for conflicting commands could create driver confusion, STOP signs shall not be installed at intersections where traffic control signals are installed and operating except as noted in Section 4D.01.

Portable or part-time STOP signs shall not be used except for emergency and temporary traffic control zone purposes.

Guidance:

STOP signs should not be used for speed control.

STOP signs should be installed in a manner that minimizes the numbers of vehicles having to stop. At intersections where a full stop is not necessary at all times, consideration should be given to using less restrictive measures such as YIELD signs (see Section 2B.08).

Section 2B.07 Multiway Stop Applications (continued)

Guidance:

The decision to install multiway stop control should be based on an engineering study.

The following criteria should be considered in the engineering study for a multiway STOP sign installation:

*A. Where traffic control signals are justified, the multiway stop is an interim measure that can be installed quickly to control traffic while arrangements are being made for the installation of the traffic control signal. **(Not Applicable)***

B. A crash problem, as indicated by 5 or more reported crashes in a 12-month period that are susceptible to

correction by a multiway stop installation. Such crashes include right- and left-turn collisions as well as right-angle collisions. **(Warrant Not Satisfied – See Accident History)**

C. Minimum volumes:

1. The vehicular volume entering the intersection from the major street approaches (total of both approaches) averages at least 300 vehicles per hour for any 8 hours of an average day, and **(Warrant Not Satisfied – See Traffic Count)**

2. The combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches (total of both approaches) averages at least 200 units per hour for the same 8 hours, with an average delay to minor-street vehicular traffic of at least 30 seconds per vehicle during the highest hour, but **(Warrant Not Satisfied – See Traffic Count)**

3. If the 85th-percentile approach speed of the major-street traffic exceeds 65 km/h or exceeds 40 mph, the minimum vehicular volume warrants are 70 percent of the above values. **(Warrant Not Satisfied)**

D. Where no single criterion is satisfied, but where Criteria B, C.1, and C.2 are all satisfied to 80 percent of the minimum values. Criterion C.3 is excluded from this condition. **(Warrant Not Satisfied)**

Option:

Other criteria that may be considered in an engineering study include:

A. The need to control left-turn conflicts; **(Warrant Not Satisfied)**

B. The need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes; **(Warrant Not Satisfied – See Traffic and Pedestrian Count)**

C. Locations where a road user, after stopping, cannot see conflicting traffic and is not able to reasonably safely negotiate the intersection unless conflicting cross traffic is also required to stop; and **(Warrant Satisfied – Appleton Street)**

D. An intersection of two residential neighborhood collector (through) streets of similar design and operating characteristics where multiway stop control would improve traffic operational characteristics of the intersection. **(Warrant Not Satisfied)**

Observations

While gathering information in the field at the intersection location and while doing the Traffic Count a number of observations were made;

- At lunchtime and late in the afternoon the traffic increases to the two taverns/restaurants one block south. Traffic appeared to move very smoothly.
- The majority of the vehicles observed at the First Street stop signs did not come to a complete stop. Vehicles on Appleton Street made complete stops more often.
- A number of stopped vehicles on Appleton Street were reluctant to pull out onto First Street because of the speed of vehicles on First Street as they approached the intersection. While doing the traffic count it is evident that the vehicles speed on this stretch of First Street. This was verified by speeds we observed with a radar gun. Of the total vehicles observed, 72% were driving above the speed limit approaching or leaving the intersection with a maximum speed of 40 mph. The stop signs slowed the traffic at the intersection but approaching and leaving the intersection, there is still an excessive speed issue.
- The property at the NW corner of the intersection had numerous vehicles in and out of the area with high speeds while entering and exiting the intersection.
- In gathering information for the Traffic Study, the majority of the concerns brought to our attention are speed related. As was noted previously by the MUTCD **STOP signs should not be used for speed control.**

Recommendations

As the Traffic Study points out, Guidance/Warrants for a Multiway Stop Application from the MUTCD are not substantially satisfied at this intersection. Using the AASHTO design criteria for intersection sight distance and numerous observations at the intersection, I feel safety is a valid concern. To obtain the 335 foot clear vision triangle for a northbound vehicle, the motorist needs to stop at the stop sign in the proper position in the travel lane. Any deviation from this adversely affects the clear vision of the encroaching building. When a motorist is southbound and looking east, there are a number of very large trees in the clear vision triangle. These trees may not completely block an approaching vehicle but they do cause clear vision concerns. With this restricted views, I recommend that the four way stop signs be made permanent. In my opinion, excessive speed should be handled through enforcement because the 90 day trial period did not stop the speeding issue.

DETAILS OF ACCIDENT HISTORY

PERIOD STUDIED: FROM: _____ TO: _____ 0 MONTHS		# VEHICLES	SEVERITY	LIGHT CONDITION	ROAD CHARACTER	SURFACE	WEATHER	ROUTE NUMBER/STREET NAME: Appleton St. LOCATION 00 block B MUNICIPALITY: Menasha REFERENCE MARKERS / NODES: COUNTY: Winnebago		CASE No. FILE: appletonst_00blB BY: cr DATE: 1/8/2007		
No.	DATE	TIME					CONTRIB. FACTORS		ACC. TYPE	ACCIDENT DESCRIPTION		KEY #
3	11/25/1994	1:00		PDO			1	1		OTH		
4	10/4/1995	13:51		PDO			1	2		OTH		
5	9/10/1997	0:03		PDO			1	1		OTH		
6	7/23/1998	20:00		PDO			1	1		OTH		
8	8/20/2005	2:18	1	INJ	4	1	1	2	3 2	Ped	veh. 1 backed over or struck 3 people around it.	
7	1/6/1999	10:15		PDO				4		RAN		

ACCIDENT SUMMARY SHEET

ROUTE: *Appleton St.*

LOCATION: *00 block B*

MUNICIPALITY: *Menasha*

COUNTY: *Winnebago*

TIME PERIOD COVERED: *-*

REFERENCE MARKERS / NODES: *-*

REMARKS: *All Accidents*

DATE: *1/8/2007*

TIME OF DAY	# ACC	%	DIRECTION	# ACC	%	DIRECTION	# ACC	%
6 AM - 10 AM	0	0.0%	North	2	18.2%	Northeast	0	0.0%
10 AM - 4 PM	2	33.3%	South	2	18.2%	Northwest	1	9.1%
4 PM - 7 PM	0	0.0%	East	3	27.3%	Southeast	0	0.0%
7 PM - 12 AM	1	16.7%	West	3	27.3%	Southwest	0	0.0%
12 AM - 6 AM	3	50.0%				Unspecified	0	0.0%
Unspecified	0	0.0%						
Total	6		Total	11				

WEATHER	# ACC	%	ACCIDENT TYPE	# ACC	%	ACCIDENT TYPE	# ACC	%
Clear	3	50.0%	Rear End	0	0.0%	Pedestrian	1	16.7%
Cloudy	2	33.3%	Overtake	0	0.0%	Bicycle	0	0.0%
Rain	0	0.0%	Right Angle	1	16.7%	Parked Vehicle	0	0.0%
Snow	1	16.7%	Left Turn	0	0.0%	Backing	0	0.0%
Sleet/Hail/Freezing Rain	0	0.0%	Right Turn	0	0.0%	Run Off The Road	0	0.0%
Fog/Smog/Smoke	0	0.0%	Fixed Object	0	0.0%	Animal	0	0.0%
Unspecified	0	0.0%	Head On	0	0.0%	Other	4	66.7%
			Sideswipe	0	0.0%	Unspecified	0	0.0%
Total	6		Total	6				

SURFACE	# ACC	%	ACCIDENT SEVERITY	# ACC	%
Dry	5	83.3%	Fatal	0	0.0%
Wet	0	0.0%	Injury	1	16.7%
Mud/Slush	0	0.0%	Property Damage	5	83.3%
Snow/Ice	1	16.7%	Non-Reportable	0	0.0%
Unspecified	0	0.0%			
Total	6		Total	6	

TIME OF YEAR	# ACC	%	TYPE OF VEHICLE	# ACC	%
Winter (Dec-Feb)	1	16.7%	Passenger Cars	1	100.0%
Spring (Mar-May)	0	0.0%	Commercial Vehicles	0	0.0%
Summer (Jun-Aug)	2	33.3%			
Fall (Sep-Nov)	3	50.0%	Total	1	
Total	6				

DAY OF WEEK	# ACC	%	LIGHT CONDITION	# ACC	%
Sunday	0	0.0%	Daylight	0	0.0%
Monday	0	0.0%	Dawn/Dusk	0	0.0%
Tuesday	1	16.7%	Night	1	16.7%
Wednesday	3	50.0%	Unspecified	5	83.3%
Thursday	0	0.0%			
Friday	1	16.7%	Total	6	
Saturday	1	16.7%			
Total	6				

SUMMARY OF ACCIDENT SEVERITY BY YEAR:

	0
Fatal Accidents	0
Injury Accidents	0
Property Damage Accidents	0
Non-Reportable Accidents	0
Total Accidents	0

COLLISION DIAGRAM

Key Number =

MUNICIPALITY: <u>Menasha</u>	COUNTY: <u>Winnebago</u>	FILE: <u>appletonst_00blB</u>
INTERSECTION: <u>Appleton St.</u>		CASE #: _____
PERIOD: <u>0</u> YEARS <u>0</u> MONTHS	FROM _____ TO _____	BY: <u>cr</u> DATE: <u>1/8/2007</u>

Northbound 

Appleton St.




Appleton St.

6
3 4 5

SYMBOLS

	MOVING VEHICLE	P	PEDESTRIAN
	TURNING VEHICLE	B	BICYCLIST
	BACKING VEHICLE	A	ANIMAL
	PARKED VEHICLE		FIXED OBJECT
	RECORD NUMBER		Fatal

MANNER OF COLLISION

	REAR END		HEAD ON
	LEFT TURN		RIGHT TURN
	LEFT TURN		RIGHT TURN
	OVERTAKE		RIGHT ANGLE
	OUT OF CONTROL		SIDE SWIPE

DETAILS OF ACCIDENT HISTORY

PERIOD STUDIED: FROM: TO:		0 MONTHS		# VEHICLES	SEVERITY	LIGHT COND	ROAD CHAIR	SURFACE	WEATHER	ROUTE NUMBER/STREET NAME: Appleton St. LOCATION 100 block MUNICIPALITY: Menasha COUNTY: Winnebago REFERENCE MARKERS / NODES:		CASE No. FILE: appletonst_100bl BY: cr DATE: 1/8/2007		
No.	DATE	TIME	CONTRIB. FACTORS									ACC. TYPE	ACCIDENT DESCRIPTION	KEY #
1	3/7/1998	17:54	PDO					1	1			RAN		

ACCIDENT SUMMARY SHEET

ROUTE: *Appleton St.*

LOCATION: *100 block*

MUNICIPALITY: *Menasha*

COUNTY: *Winnebago*

TIME PERIOD COVERED: -

REFERENCE MARKERS / NODES: -

REMARKS: *All Accidents*

DATE: *1/8/2007*

TIME OF DAY	# ACC	%	DIRECTION	# ACC	%	DIRECTION	# ACC	%
6 AM - 10 AM	0	0.0%	North	1	50.0%	Northeast	0	0.0%
10 AM - 4 PM	0	0.0%	South	0	0.0%	Northwest	0	0.0%
4 PM - 7 PM	1	100.0%	East	0	0.0%	Southeast	0	0.0%
7 PM - 12 AM	0	0.0%	West	1	50.0%	Southwest	0	0.0%
12 AM - 6 AM	0	0.0%				Unspecified	0	0.0%
Unspecified	0	0.0%						
Total	1		Total	2				

WEATHER	# ACC	%	ACCIDENT TYPE	# ACC	%	ACCIDENT TYPE	# ACC	%
Clear	1	100.0%	Rear End	0	0.0%	Pedestrian	0	0.0%
Cloudy	0	0.0%	Overtake	0	0.0%	Bicycle	0	0.0%
Rain	0	0.0%	Right Angle	1	100.0%	Parked Vehicle	0	0.0%
Snow	0	0.0%	Left Turn	0	0.0%	Backing	0	0.0%
Sleet/Hail/Freezing Rain	0	0.0%	Right Turn	0	0.0%	Run Off The Road	0	0.0%
Fog/Smog/Smoke	0	0.0%	Fixed Object	0	0.0%	Animal	0	0.0%
Unspecified	0	0.0%	Head On	0	0.0%	Other	0	0.0%
			Sideswipe	0	0.0%	Unspecified	0	0.0%
Total	1		Total	1				

SURFACE	# ACC	%
Dry	1	100.0%
Wet	0	0.0%
Mud/Slush	0	0.0%
Snow/Ice	0	0.0%
Unspecified	0	0.0%
Total	1	

ACCIDENT SEVERITY	# ACC	%
Fatal	0	0.0%
Injury	0	0.0%
Property Damage	1	100.0%
Non-Reportable	0	0.0%
Total	1	

TIME OF YEAR	# ACC	%
Winter (Dec-Feb)	0	0.0%
Spring (Mar-May)	1	100.0%
Summer (Jun-Aug)	0	0.0%
Fall (Sep-Nov)	0	0.0%
Total	1	

TYPE OF VEHICLE	# ACC	%
Passenger Cars	0	0.0%
Commercial Vehicles	0	0.0%
Total	-1	

DAY OF WEEK	# ACC	%
Sunday	0	0.0%
Monday	0	0.0%
Tuesday	0	0.0%
Wednesday	0	0.0%
Thursday	0	0.0%
Friday	0	0.0%
Saturday	1	100.0%
Total	1	

LIGHT CONDITION	# ACC	%
Daylight	0	0.0%
Dawn/Dusk	0	0.0%
Night	0	0.0%
Unspecified	1	100.0%
Total	1	

SUMMARY OF ACCIDENT SEVERITY BY YEAR:

	0
Fatal Accidents	0
Injury Accidents	0
Property Damage Accidents	0
Non-Reportable Accidents	0
Total Accidents	0

COLLISION DIAGRAM

Key Number =


















MUNICIPALITY: <u>Menasha</u>	COUNTY: <u>Winnebago</u>	FILE: <u>appletonst_100bl</u>
INTERSECTION: <u>Appleton St.</u>		CASE #: _____
PERIOD: <u>0</u> YEARS <u>0</u> MONTHS	FROM _____ TO _____	BY: <u>cr</u> DATE: <u>1/8/2007</u>

Northbound 

Appleton St.

Appleton St.



SYMBOLS		MANNER OF COLLISION	
 MOVING VEHICLE	P PEDESTRIAN	 REAR END	 HEAD ON
 TURNING VEHICLE	B BICYCLIST	 LEFT TURN	 RIGHT TURN
 BACKING VEHICLE	A ANIMAL	 LEFT TURN	 RIGHT TURN
 PARKED VEHICLE	 FIXED OBJECT	 OVERTAKE	 RIGHT ANGLE
 RECORD NUMBER	 Fatal	 OUT OF CONTROL	 SIDE SWIPE

DETAILS OF ACCIDENT HISTORY

PERIOD STUDIED: FROM: _____ TO: _____ 0 MONTHS		# VEHICLES		S E V E R I T Y		L I G H T C O N D		R O A D C H A R		S U R F A C E		W E A T H E R		ROUTE NUMBER/STREET NAME: First St. LOCATION at Appleton St. MUNICIPALITY: Menasha COUNTY: Winnebago REFERENCE MARKERS / NODES: -		CASE No. FILE: first_appleton BY: cr DATE: 1/8/2007		
No.	DATE	TIME													CONTRIB. FACTORS	ACC. TYPE	ACCIDENT DESCRIPTION	KEY #
3	8/31/2001	1:00			PDO						1 1		1 1			FIXO		
2	6/16/2000	23:27			INJ						1 2		1 2			OTH		
4	7/19/2003	1:16	2		PDO		5		1		1 1		1 1			Park	unit 2 was struck by unit 1 while legally parked; hit and run	
1	2/4/1994	18:17			PDO						1 1		1 1			RAN		
5	2/29/2004	12:09	2		INJ		1		1		1 1		1 2		7	Rang	unit 1 pulled out from stop sign and struck oncoming unit 2	

ACCIDENT SUMMARY SHEET

ROUTE: *First St.*

LOCATION: *at Appleton St.*

MUNICIPALITY: *Menasha*

COUNTY: *Winnebago*

TIME PERIOD COVERED: -

REFERENCE MARKERS / NODES: -

REMARKS: *All Accidents*

DATE: *1/8/2007*

TIME OF DAY	# ACC	%	DIRECTION	# ACC	%	DIRECTION	# ACC	%
6 AM - 10 AM	0	0.0%	North	0	0.0%	Northeast	0	0.0%
10 AM - 4 PM	1	20.0%	South	2	25.0%	Northwest	0	0.0%
4 PM - 7 PM	1	20.0%	East	1	12.5%	Southeast	0	0.0%
7 PM - 12 AM	1	20.0%	West	4	50.0%	Southwest	0	0.0%
12 AM - 6 AM	2	40.0%				Unspecified	1	12.5%
Unspecified	0	0.0%	Total	8				
Total	5							
WEATHER	# ACC	%	ACCIDENT TYPE	# ACC	%	ACCIDENT TYPE	# ACC	%
Clear	3	60.0%	Rear End	0	0.0%	Pedestrian	0	0.0%
Cloudy	2	40.0%	Overtake	0	0.0%	Bicycle	0	0.0%
Rain	0	0.0%	Right Angle	2	40.0%	Parked Vehicle	1	20.0%
Snow	0	0.0%	Left Turn	0	0.0%	Backing	0	0.0%
Sleet/Hail/Freezing Rain	0	0.0%	Right Turn	0	0.0%	Run Off The Road	0	0.0%
Fog/Smog/Smoke	0	0.0%	Fixed Object	1	20.0%	Animal	0	0.0%
Unspecified	0	0.0%	Head On	0	0.0%	Other	1	20.0%
			Sideswipe	0	0.0%	Unspecified	0	0.0%
Total	5		Total	5				
SURFACE	# ACC	%	ACCIDENT SEVERITY	# ACC	%			
Dry	5	100.0%	Fatal	0	0.0%			
Wet	0	0.0%	Injury	2	40.0%			
Mud/Slush	0	0.0%	Property Damage	3	60.0%			
Snow/Ice	0	0.0%	Non-Reportable	0	0.0%			
Unspecified	0	0.0%	Total	5				
Total	5							
TIME OF YEAR	# ACC	%	TYPE OF VEHICLE	# ACC	%			
Winter (Dec-Feb)	2	40.0%	Passenger Cars	4	100.0%			
Spring (Mar-May)	0	0.0%	Commercial Vehicles	0	0.0%			
Summer (Jun-Aug)	3	60.0%	Total	4				
Fall (Sep-Nov)	0	0.0%						
Total	5							
DAY OF WEEK	# ACC	%	LIGHT CONDITION	# ACC	%			
Sunday	1	20.0%	Daylight	1	20.0%			
Monday	0	0.0%	Dawn/Dusk	0	0.0%			
Tuesday	0	0.0%	Night	1	20.0%			
Wednesday	0	0.0%	Unspecified	3	60.0%			
Thursday	2	40.0%	Total	5				
Friday	1	20.0%						
Saturday	1	20.0%						
Total	5							

SUMMARY OF ACCIDENT SEVERITY BY YEAR:





















	0
Fatal Accidents	0
Injury Accidents	0
Property Damage Accidents	0
Non-Reportable Accidents	0
Total Accidents	0

COLLISION DIAGRAM

Key Number =

MUNICIPALITY: <u>Menasha</u>	COUNTY: <u>Winnebago</u>	FILE: <u>first_appleton</u>
INTERSECTION: <u>First St.</u>		CASE #: _____
PERIOD: <u>0</u> YEARS <u>0</u> MONTHS	FROM _____ TO _____	BY: <u>cr</u> DATE: <u>1/8/2007</u>



SYMBOLS				MANNER OF COLLISION			
	MOVING VEHICLE		PEDESTRIAN		REAR END		HEAD ON
	TURNING VEHICLE		BICYCLIST		LEFT TURN		RIGHT TURN
	BACKING VEHICLE		ANIMAL		LEFT TURN		RIGHT TURN
	PARKED VEHICLE		FIXED OBJECT		OVERTAKE		RIGHT ANGLE
	RECORD NUMBER		Fatal		OUT OF CONTROL		SIDE SWIPE

CHANGE ORDER

DATE: January 30, 2007

CHANGE ORDER NO: Two (2)

CONTRACTOR: Vinton Construction Company

CONTRACT NO.: 2006-06

PROJECT: River Street Relocation Roadway Construction

You are directed to make the changes noted below in the subject contract unit number.

1 L.S.	2' x 3' Inlet Castings @ \$425.00	\$ 425.00
28 EA	Spreading Junipers @ \$30.00	\$ 840.00
5 EA	Japanese Tree Lilacs @ \$150	\$ 750.00
19 EA	Minuet Weigela @ \$30.00	\$ 570.00
3 EA	Miss Kim Lilac @ \$30.00	\$ 90.00
2 EA	Inlet Type 3 @ \$1,085.00	\$ 2,170.00
4 EA	Adjust Manhole Covers @ \$280.00	\$ 1,120.00
6 EA	Adjust Valve Boxes @ \$150.00	\$ 900.00
2 EA	Salvaged Inlet Covers @ \$200.00	\$ 400.00
607 LF	Pavement Marking Epoxy 4-Inch @ \$1.80	\$ 1,092.60
963 LF	Pavement Marking Parking Stall Paint @ \$3.00	\$ 2,889.00
47 SY	Concrete Pavement HES 8-inch @ \$39.80	<u>\$ 1,870.60</u>
	TOTAL	\$13,117.20

The changes result in the following adjustments:

	CONTRACT - TOTAL	TIME
Prior to this Change Order	\$ 524,960.34	_____ Days
Adjustments per this Change Order	\$ 13,147.20	_____ Days
Current Contract Status	\$ 538,077.54	_____ Days

Directed/Authorized
City of Menasha Dept. of Public Works

Accepted

BY: _____

BY: _____

DATE: _____

DATE: _____

CITY OF MENASHA

CONTRACT UNIT NO. 2006-08

Storm Sewer, Sanitary, Water Main, Street Construction & Detention Basin Construction

Date: Janu
Payment No.

ITEM	QUANTITY	DESCRIPTION	BASE BID		QUANTITY
			Unit Price	TOTAL	
		Sanitary Sewer			
1	1,095	8" PVC SDR-35 Sanitary Sewer, /lf	\$ 18.00	\$ 19,710.00	1094
2	50	48" ID Waterproof, Pre-cast Sanitary Manhole/vf	\$ 170.00	\$ 8,508.50	62.23
3	9	Internal Manhole Chimney Seal/ea	\$ 230.00	\$ 2,070.00	0
4	9	Sanitary Sewer Manhole Castings/ea	\$ 280.00	\$ 2,520.00	9
5	37	6" PVC Schedule 40 Sanitary Lateral/lf	\$ 20.00	\$ 740.00	36
6	696	4" PVC Schedule 40 Sanitary Lateral/lf	\$ 17.00	\$ 11,832.00	724
7	758	2" Polystyrene Insulation (sanitary)	\$ 5.50	\$ 4,169.00	771
		Sanitary Sewer Sub Total		\$ 49,549.50	
		Water Main			
1	1,278	8" PVC Water Main/lf	\$ 23.00	\$ 29,394.00	1269
2	6	Fire Hydrant/ea	\$ 2,100.00	\$ 12,600.00	6
3	1	8" Tapping Tee and Valve/ea	\$ 2,400.00	\$ 2,400.00	1
4	74	6" Hydrant Lead/lf	\$ 24.00	\$ 1,776.00	81
5	6	6" Auxiliary Hydrant Gate Valve/ea	\$ 740.00	\$ 4,440.00	6
6	6	8" Gate Valve/ea	\$ 1,000.00	\$ 6,000.00	6
7	16	1 1/4" Service Connections/ea	\$ 275.00	\$ 4,400.00	16
8	686	1 1/4" PVC SDR9 Water Service/lf	\$ 10.00	\$ 6,860.00	684
9	1	1 1/2" Service Connections/ea	\$ 400.00	\$ 400.00	1
10	63	1 1/2" PVC SDR9 Water Service/lf	\$ 10.00	\$ 630.00	56
		Water Main Sub Total		\$ 68,900.00	

		Storm Sewer				
1	53	24" Storm Sewer/lf	\$	29.00	\$	1,537.00
2	471	18" Storm Sewer/lf	\$	23.00	\$	10,833.00
3	433	18" RCP Storm Sewer, Class IV/lf	\$	26.00	\$	11,258.00
4	201	15" Storm Sewer/lf	\$	20.00	\$	4,020.00
5	708	15" RCP Storm Sewer, Class IV/lf	\$	22.00	\$	15,576.00
6	505	12" Storm Sewer/lf	\$	18.00	\$	9,090.00
7	163	12" RCP Storm Sewer, Class IV/lf	\$	20.00	\$	3,260.00
8	33	10" Storm Inlet Leads/lf	\$	20.00	\$	660.00
9	61.1	48" ID Pre-cast Standard Storm Manhole/vf	\$	190.00	\$	11,609.00
10	6	72" ID Pre-cast Storm Manhole/vf	\$	350.00	\$	2,100.00
11	1	Storm Sewer Manhole Castings, Type H/ea	\$	365.00	\$	365.00
12	1	Storm Sewer Manhole Castings, Type HS/ea	\$	365.00	\$	365.00
13	13	Storm Sewer Manhole Castings, Type J/ea	\$	270.00	\$	3,510.00
14	18	24"x36" pre-cast inlet w/castings/ea	\$	970.00	\$	17,460.00
15	2	Field Inlet w/casting (Type 8 inlet, MS grate)/ea	\$	1,290.00	\$	2,580.00
16	1	30" ID Pre-cast Yard Drain w/casting/ea	\$	935.00	\$	935.00
17	1	12" Concrete Apron Endwall/ea	\$	320.00	\$	320.00
18	1	12" Apron Endwall for PVC Pipe/ea	\$	100.00	\$	100.00
19	2	18" Concrete Apron Endwall/ea	\$	400.00	\$	800.00
20	1	24" Concrete Apron Endwall/ea	\$	525.00	\$	525.00
21	5	Pipe Grates/ea	\$	420.00	\$	2,100.00
22	1	12" Orifice Plate for Outlet Pipe/ea	\$	50.00	\$	50.00
23	1	Pond Outlet Structure w/Neenah Casting/ea	\$	1,850.00	\$	1,850.00
24	49	12" PVC SDR-35 Storm Sewer/lf	\$	21.00	\$	1,029.00
		Storm Sewer Sub Total			\$	101,932.00
		Site Grading, Erosion Control & Street Construction				

1	1.07	Clearing and Grubbing/acre	\$ 3,030.00	\$ 3,242.10	1.07
2	45	Remove Culvert/lf	\$ 5.00	\$ 225.00	0
3	1,100	Unclassified Excavation/cy	\$ 4.55	\$ 5,005.00	1100
4	200	Excavation Below Subgrade (undistributed)/cy	\$ 5.05	\$ 1,010.00	177
5	200	Breaker Run (undistributed)/cy	\$ 14.86	\$ 2,972.00	0
6	13,688	Fine Grading/sy	\$ 0.01	\$ 136.88	0
7	6,436	Crushed Aggregate Base Course/ton	\$ 8.00	\$ 51,488.00	5009.58
8	17,771	Restoration (salvage topsoil, seed, fert, mulch)/sy	\$ 0.70	\$ 12,439.70	0
9	973	2" Asphalt Binder (temp)/ton	\$ 53.25	\$ 51,812.25	0
10	72	Sawcut and Remove Curb/lf	\$ 5.00	\$ 360.00	0
11	1	Sawcut and Remove Asphalt/lump sum	\$ 50.00	\$ 50.00	0
12	85	Sawcutting/lf	\$ 1.50	\$ 127.50	0
13	335	Grassed Drainageway Construction/lf	\$ 4.00	\$ 1,340.00	0
14	2	Install & Maintain Tracking Pad/ea	\$ 1,000.00	\$ 2,000.00	1
15	2,884	Install & Maintain Silt Fence/lf	\$ 1.05	\$ 3,028.20	2421
16	5	Install & Maintain Ditch Checks/ea	\$ 100.00	\$ 500.00	0
17	25	Inlet Protection/ea	\$ 42.00	\$ 1,050.00	21
18	91	Riprap with Fabric/sy	\$ 25.00	\$ 2,275.00	0
19	1,949	Erosion Mat Class I, Type B/sy	\$ 1.25	\$ 2,436.25	0
20	1	Excavation & Grading for Stormwater Pond-Nature's Way Subdivision/lump sum	\$ 6,100.00	\$ 6,100.00	1
21	1	Excavation & Grading for Stormwater Pond-Province Terrace/lump sum	\$ 10,100.00	\$ 10,100.00	1
22	500	Borrow (if required)	\$ 5.05	\$ 2,525.00	0
		Site Grading, Erosion Control & Street Construction Sub Total		\$ 160,222.88	
		Contract Total		\$ 380,604.38	
		Additional Unit Prices			
	1	Alternate Clay Liner (if required)/sy	\$ 5.05	\$ 5.05	

January 30, 2007
 . Three

7TD	
TOTAL	
\$ 19,692.00	
\$ 10,579.10	
\$ -	
\$ 2,520.00	
\$ 720.00	
\$ 12,308.00	
\$ 4,240.50	
\$ 50,059.60	
\$ 29,187.00	
\$ 12,600.00	
\$ 2,400.00	
\$ 1,944.00	
\$ 4,440.00	
\$ 6,000.00	
\$ 4,400.00	
\$ 6,840.00	
\$ 400.00	
\$ 560.00	
\$ 68,771.00	

	\$ 3,161.00
	\$ 4,071.00
	\$ 19,461.00
	\$ 3,380.00
	\$ 15,411.00
	\$ 3,528.00
	\$ 10,660.00
	\$ -
	\$ 11,650.80
	\$ 2,100.00
	\$ -
	\$ -
	\$ 3,780.00
	\$ 17,460.00
	\$ 2,580.00
	\$ 935.00
	\$ 320.00
	\$ 100.00
	\$ 800.00
	\$ 1,050.00
	\$ 2,520.00
	\$ 100.00
	\$ 1,850.00
	\$ 1,060.50
	\$ 105,978.30

\$	3,242.10
\$	-
\$	5,005.00
\$	893.85
\$	-
\$	-
\$	40,076.64
\$	-
\$	-
\$	-
\$	-
\$	-
\$	-
\$	1,000.00
\$	2,542.05
\$	-
\$	882.00
\$	-
\$	-
\$	6,100.00
\$	10,100.00
\$	-
\$	69,841.64
\$	294,650.54
\$	-
\$	-

CERTIFICATE OF PAYMENT

DATE: January 30, 2007

PAYMENT REQUEST: Three (3)

CONTRACTOR: Dorner, Inc.

ADDRESS: E506 Luxemburg Rd., P.O. Box 129, Luxemburg, WI 54217

CONTRACT UNIT NUMBER: 2006-08

PROJECT DESCRIPTION: Nature's Way

ORIGINAL CONTRACT AMOUNT	\$ 377,951.38
CHANGE ORDER NO. -	AMOUNT: \$ -
PREVIOUS CHANGE ORDER(S):	\$ 3,560.80
TOTAL CONTRACT AMOUNT (INCLUDING CHANGE ORDERS)	\$ 381,512.18
TOTAL EARNED TO DATE (SUMMARY ATTACHED)	\$ 294,650.54
LESS RETAINAGE 5%	\$ 14,732.52
AMOUNT DUE	\$ 279,918.02
PREVIOUS PAYMENTS	\$ 235,068.67
AMOUNT DUE THIS PAYMENT	\$ 44,849.35

ESTIMATE PERIOD: FROM January 8, 2007 To: January 30, 2007

I certify that all bills for labor, equipment, materials, and services are paid for which previous certificates for payment were issued.

DATE: _____ BY: _____

Lien Waivers from all subcontractors and suppliers shall accompany each Request for Payment. Affidavit of Compliance with Prevailing Wage Rates shall accompany Request for Final Payment.

RECOMMENDED FOR PAYMENT:

DIRECTOR OF PUBLIC WORKS: _____ DATE: _____

APPROVED FOR PAYMENT: COUNCIL APPROVAL DATE: _____

FINANCE DEPARTMENT

<u>ACCOUNT NUMBER</u>	<u>BUDGET</u>	<u>CHARGE TO ACCOUNT</u>
_____	\$ _____	_____
_____	\$ _____	_____
_____	\$ _____	_____
_____	\$ _____	_____

CERTIFICATE OF PAYMENT

DATE: January 30, 2007

PAYMENT REQUEST: Five (5)

CONTRACTOR: Vinton Construction Company

ADDRESS: 2705 North Rapids Road, PO Box 1987, Manitowoc, WI 54220

CONTRACT UNIT NUMBER: 2006-06

PROJECT DESCRIPTION: River Street Relocation Roadway Construction

ORIGINAL CONTRACT AMOUNT	\$519,434.09
--------------------------	--------------

CHANGE ORDER NO. Two	AMOUNT: \$ 13,117.20
----------------------	----------------------

PREVIOUS CHANGE ORDER(S): \$5,526.25

TOTAL CONTRACT AMOUNT (INCLUDING CHANGE ORDERS)	\$538,077.54
---	--------------

TOTAL EARNED TO DATE (SUMMARY ATTACHED)	\$579,736.97
---	--------------

LESS RETAINAGE (5%)	\$ 14,493.42
---------------------	--------------

AMOUNT DUE	\$565,243.55
------------	--------------

PREVIOUS PAYMENTS	\$542,224.38
-------------------	--------------

AMOUNT DUE THIS PAYMENT	\$ 23,019.17
-------------------------	--------------

ESTIMATE PERIOD: From December 14, 2007 to January 30, 2007

I certify that all bills for labor, equipment, materials, and services are paid for which previous certificates for payment were issued.

DATE: _____ BY: _____

Lien Waivers from all subcontractors and suppliers shall accompany each Request for Payment. Affidavit of Compliance with Prevailing Wage Rates shall accompany Request for Final Payment.

RECOMMENDED FOR PAYMENT:

DIRECTOR OF PUBLIC WORKS: _____ DATE: _____

APPROVED FOR PAYMENT: COUNCIL APPROVAL DATE: _____

FINANCE DEPARTMENT

ACCOUNT NUMBER

BUDGET

CHARGE TO ACCOUNT

_____	\$ _____	_____
_____	\$ _____	_____
_____	\$ _____	_____
_____	\$ _____	_____

CITY OF MENASHA

CONTRACT UNIT NO. 2006-06

RIVER STREET RELOCATION STORM SEWER & WATER MAIN CONSTRUCTION

Vinton Construction

DATE: January 30, 2007

Payment No. FIVE

ITEM	QUANTITY	DESCRIPTION	BASE BID		QUANTITY	YTD	
			Unit Price	TOTAL			TOTAL
		Removals					
1	258	Removing Pavement/SY	\$ 3.20	\$ 825.60	995	\$	3,184.00
2	1000	Removing Asphaltic Surface/SY	\$ 1.60	\$ 1,600.00	5365	\$	8,584.00
3	1455	Removing Curb & Gutter/LF	\$ 0.85	\$ 1,236.75	256	\$	217.60
4	176	Removing Concret Sidewalk/SY	\$ 3.00	\$ 528.00	146	\$	438.00
5	5	Removing Inlets/each	\$ 150.00	\$ 750.00	6	\$	900.00
6	35	Sawing Existing Pavement/LF	\$ 2.00	\$ 70.00	412	\$	824.00
7	125	Sawing Concrete Pavement Full Depth/LF	\$ 3.00	\$ 375.00	201	\$	603.00
					Removals	\$	14,750.60
		Sewer & Water					
8	88	Storm Sewer Pipe 10-inch/LF	\$ 31.00	\$ 2,728.00	122	\$	3,782.00
9	2	Inlet Type 3/each	\$ 1,085.00	\$ 2,170.00	4	\$	4,340.00
10	1	Reconstructing Manholes/each	\$ 1,345.00	\$ 1,345.00	1	\$	1,345.00
11	2	Adjust Manhole Covers/each	\$ 280.00	\$ 560.00	6	\$	1,680.00
12	6	Adjust Inlet Covers/each	\$ 250.00	\$ 1,500.00	6	\$	1,500.00
13	13	Adjust Valve Boxes/each	\$ 150.00	\$ 1,950.00	19	\$	2,850.00
14	2	Salvaged Inlet Covers/each	\$ 200.00	\$ 400.00	4	\$	800.00
				Storm Sewer Total		\$	16,297.00
		Grade & Gravel					
15	9464	Excavation, Hauling & Disposal of Contaminated Soil/Ton	\$ 21.80	\$ 206,315.20		\$	-
16	1033	Excavation Common/CY	\$ 9.90	\$ 10,226.70	2526	\$	25,007.40
17	1	Prepare Foundation/LS	\$ 13,000.00	\$ 13,000.00	1	\$	13,000.00
18	3200	Base Aggregate Dense 3 Inch/Ton	\$ 8.23	\$ 26,336.00	631.25	\$	5,195.19
19	4094	Base Aggregate Dense 1-1/2 Inch/Ton	\$ 8.23	\$ 33,693.62		\$	-
20	3200	Base Aggregate Dense 2-1/2 Inch/Ton	\$ 8.23	\$ 26,336.00		\$	-
				Grade & Gravel		\$	43,202.59
		Roadway Surface					
21	348	HMA Pavement Type E-0.3/Ton	\$ 51.29	\$ 17,848.92		\$	-
22	2200	HMA Pavement Type E-1/Ton	\$ 44.57	\$ 98,054.00		\$	-
23	242	Concrete Curb & Gutter 18-Inch Type D/LF	\$ 11.90	\$ 2,879.80		\$	-
24	3624	Concrete Curb & Gutter 30-Inch Type D/LF	\$ 6.70	\$ 24,280.80		\$	-
25	2957	Concrete Sidewalk 4-Inch/SF	\$ 2.45	\$ 7,244.65	5727	\$	14,031.15
26	2957	Concrete Sidewalk 6-Inch/SF	\$ 2.80	\$ 8,279.60		\$	-
27	2957	Concrete Sidewalk 8-Inch/SF	\$ 3.15	\$ 9,314.55	3743	\$	11,790.45
28	59	Concrete Safety Islands/SF	\$ 2.80	\$ 165.20	84	\$	235.20
				Roadway Surface		\$	26,056.80
ITEM	QUANTITY	DESCRIPTION	Unit Price	TOTAL	QUANTITY	YTD	TOTAL

60	1	Railroad Flagger/LS		\$ 14,000.00	\$ 14,000.00	\$ 14,000.00	1	\$ 14,000.00
61	1	Traffic Control/LS		\$ 4,300.00	\$ 4,300.00	\$ 4,300.00	1	\$ 4,300.00
							Traffic Control	\$ 18,300.00
		Alternative Bid 1 (Replace Items 15, 18, 19, 20 and 21)						
1	6,472	Excavation, Hauling, and Disposal of Contaminated Soil/TON		\$ 21.80	\$ 141,089.60	\$ 141,089.60	5243.59	\$ 114,310.26
2	6,250	Concrete Pavement 8-Inch/S.Y.		\$ 23.62	\$ 147,625.00	\$ 147,625.00	7034	\$ 166,143.08
3	121	Concrete Pavement HES 8-Inch/S.Y.		\$ 28.25	\$ 3,418.25	\$ 3,418.25	502	\$ 14,181.50
4	4,094	Base Aggregate Dense 1-1/4 Inch/TON		\$ 8.23	\$ 33,693.62	\$ 33,693.62	5661.58	\$ 46,594.80
5	200	HMA Pavement Type E-1/TON		\$ 51.29	\$ 10,258.00	\$ 10,258.00	1127.2	\$ 57,814.09
							Alternate Bid 1 Items	\$ 399,043.73
		Alternate Bid 2 (Washington Street Concrete Patch)						
1	208	Removing Asphaltic Surface/SY		\$ 15.00	\$ 3,120.00	\$ 3,120.00	208	\$ 3,120.00
2	208	Concrete Pavement HES 8-Inch/SY		\$ 39.80	\$ 8,278.40	\$ 8,278.40	255	\$ 10,149.00
3	1	Traffic Control/LS		\$ 1,100.00	\$ 1,100.00	\$ 1,100.00	1	\$ 1,100.00
							Alternate Bid 2 Items	\$ 14,369.00

\$ 571,534.72



Memorandum

DATE: February 1, 2007

TO: Board of Public works

FROM: Mark Radtke, Director of Public Works

RE: Authorization to Participate in Winnebago County CTH AP Project

Attached is a correspondence from Winnebago County Highway Commissioner, John Haese, requesting a letter from the City agreeing to the cost sharing terms for the proposed 2007 CTH AP reconstruction project. The City has budgeted \$125,000 for our share of this estimated \$2,300,000 project.

I recommend authorizing the City's participation in the project with the following stipulations:

1. Costs for altering existing sidewalks and driveways that result from change in grade or alignment of CTH AP are not the sole responsibility of the City of Menasha. These costs are to be included in the overall project cost.
2. Any sanitary sewer related project costs are not the responsibility of the City of Menasha. The sanitary sewer is controlled by the Town of Menasha Utility District.

Federal and state funding comprise a significant share of this project, so it is in the best interests of the local governments to agree to complete this project this year while those funds are available.

Attachment

C: Mayor Laux

January 25, 2007

Mark Radtke
Director of Public Works
City of Menasha
140 Main Street
Menasha, WI 54952 – 3190

RE: CTH AP (Midway Road) Reconstruction Project

Dear Mr. Radtke:

The CTH AP project has been approved by WisDoT to proceed to an April 2007 bid letting. Estimated construction costs are expected to be approximately \$2, 300,000 and the project is expected to begin in early June of this year.

The City of Menasha has agreed to participate in the project and will provide funds of \$122,740 to offset the overall project costs. The City of Menasha would also be responsible for any costs directly related to the following items:

1. Installation or alteration of existing sidewalks.
2. Pedestrian/bike paths.
3. New installation or alteration of street lighting and traffic signals.
4. Mainline storm sewer.
5. Sanitary sewer.
6. Repairs due to installation or alteration of existing driveways that are not part of the project.
7. Real estate or right of way needed for any City of Menasha improvements.
8. Any incidental items that would be related to City of Menasha improvements that are not relative to the project.

The entire mainline storm sewer system has been inspected, videotaped and analyzed and did not show the need for any repairs or alterations that would require additional funding from the City of Menasha.

Please respond to me in writing by March 1, 2007 if the City of Menasha agrees to all of the above items. If you have any other questions or concerns regarding the CTH AP (Midway Road) project, please contact me at my office. Thank you.

Sincerely,

John M. Haese
Winnebago County Highway Commissioner

jmh/file
cc: Mick Magalski